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## Ruby Digital AC Servo Drives - Features

- High performance servo drive for brushless and brush servomotors
- 24 VAC to 480 VAC bus voltage
- Continuous current ratings 25 amps (230 VAC) and 12 amps (480 VAC)
- 32 bit DSP (digital signal processor)
- 16 bit A/D's and D/A's
- Network interfaces (CANopen, Ethernet IP, Sercos, etc.)
- Field-oriented commutation
- Operational modes: torque, velocity and position
- Command input options: +/-10 VDC, step/direction, master-slave
- Servomotor feedback options: incremental encoder with simulated halls, resolver, tachometer, sin-cos, EnDAT and hiperface serial encoders
- UL, CE and RoHS compliant



The Ruby digital drives combine both performance and functionality for the discriminating OEM. Performance is delivered through a DSP and external high resolution A/D's and D/A's. The architecture is designed to maintain the lowest level of radiation emission and electrical noise. The Ruby also incorporates simple to install compact, bookshelf mounting.

Series	200				300								400			
Model	202	204	208	212	302	304	308	312	315	320	325	402	404	408	412	
Motor	Brush, Brushless															
Operating Modes	Current, Velocity, Position, Gearing, Dual Loop															
Supply Voltage (VAC)	120 ± 10% (1Φ)				230 ± 10% (1,3Φ)								380 ± 10%, 480 ± 10% (3Φ)			
Continuous Output Current (Amp)	2	4	8	12	2	4	8	12	15	20	25	2	4	8	12	
Peak Output Current (Amp), Max 3 Sec	6	12	24	36	6	12	24	36	30	40	50	6	12	16	24	
Current Loop Bandwidth(Hz)	3300															
Velocity Loop Bandwidth(Hz)	350															
Digital In, Digital Out, Analog In, Analog Out	4, 3, 2, 2															
Communications	USB 2.0 Mini-B- Receptacle, Current Rating 1 A, Voltage Rating 5 VAC, Transmission speeds up to 480															

## Analog Servo Drives

Servo Dynamics drives are designed with trapezoidal commutation for low cost and easy installation. The torque and velocity loop is analog for high performance applications. The BL/BR series with VDC bus input is for multi-axis configuration and the BLS/BRS series with VAC bus input is for single axis applications. These drives can operate in torque or velocity mode and produce up to 5 kW of continuous power. Servo Dynamics will help you choose the correct model and options to enable peak performance for your application. Our wide range of products and unmatched user friendly features will satisfy any servo requirements.

## Brushless Servo Drives

- High performance PWM analog design
- IGBT power devices
- BL series for VDC input
- BLS series for VAC input

Model	Continuous Torque		
	Output (cont)	Current (peak)	Supply (voltage)
815-BL	8	15	20-80
1525-BL	15	25	60-170
1525-BLS	15	25	45-120
1224-BL	12	24	70-360
1224-BLS	12	24	50-260



## Brush Servo Drives

- High performance PWM analog design
- IGBT power devices
- BR series for VDC input
- BRS series for VAC input

Model	Continuous Torque		
	Output (cont)	Current (peak)	Supply (voltage)
815-BR	8	15	20-80
1525-BR	15	25	60-170
1525-BRS	15	25	45-120



## IG Brushless Servomotors

- . Industrial grade IP 56 rated or instrument grade IP 40 rated
- . NEMA 23 and 34 rated mounting and shafts
- . Feedback options:
  - . Incremental encoder
  - . Resolver
- . Connector or flying lead cable option
- . Large selection of  $K_e$  (Volts/kRPM) constants



## Brushless AC Servomotors

- . Available with low inertia rotors for highest acceleration
- . Available with high inertia rotors for low speed stability
- . Neodymium iron boron magnets
- . Integral resolver or encoder feedback
- . Torque range 0.2 Nm to 95 Nm (1.9 to 840 lb.in.)



## Brush DC Servomotors

- . Windings available for both low and high voltage drives
- . Delivers optimum current/speed characteristics
- . Torque range 0.5 Nm to 37 Nm (4.4 to 324 lb.in.)
- . Smooth running with less than 1% ripple



Servo Dynamics is a recognized leader in providing highly competitive, reliable motion control solutions for 25 years. We design and manufacture digital and analog brushless and brush servo drives, amplifiers and servomotors for the most demanding, performance-driven applications. We are confident you will also find our product quality and customer service to be first class. Please contact us for all your motion control requirements at [sales@servodynamics.com](mailto:sales@servodynamics.com) or at [www.servodynamics.com](http://www.servodynamics.com).